## TWO OVERLOOKED HOLOTYPES OF THE HAWAIIAN FLYCATCHER CHASIEMPIS DESCRIBED BY LEONHARD STEJNEGER (AVES: MYIAGRINAE)

## Storrs L. Olson

Abstract. – The holotypes of two of the three taxa of Elepaio (Chasiempis) described by Leonhard Stejneger in 1887 have been overlooked for almost a century but were located in the collections of the British Museum (Natural History) and restudied. That of Chasiempis ridgwayi Stejneger presents no problems as it is representative of the subspecies from the windward parts of the island of Hawaii currently known as Chasiempis sandwichensis ridgwayi. The holotype of Chasiempis ibidis Stejneger, 1887, however, is identified as being from the Oahu population and this name thus takes precedence over Chasiempis gayi Wilson, 1891.

In the early literature on systematics and nomenclature of the Hawaiian flycatcher known as the Elepaio, Chasiempis sandwichensis (Gmelin), there was considerable disagreement concerning the number of taxa and their distribution. Some proponents held out for a single species (e.g. Sclater 1885, Berlepsch & Leverkühn 1890), while others recognized as many as five or six (e.g. Stejneger 1887, Wilson 1891), with the island of origin often being completely ignored, however. It was eventually determined that the Elepaio occurred only on three of the Hawaiian islands, with the population of each island coming to be recognized under a single name: C. sclateri Ridgway, 1882, on Kauai; C. gayi Wilson, 1891, on Oahu; and C. sandwichensis (Gmelin, 1789) on Hawaii. These taxa are now generally regarded as subspecies of C. sandwichensis. Geographic variation within the island of Hawaii caused Henshaw (1902) to recognize two forms there, with the second taking the name C. ridgwayi Stejneger, 1887. Pratt (1979, 1980) recognized these and described a third subspecies from Hawaii, C. s. bryani.

Leonhard Stejneger was in the thick of the early confusion surrounding the system-

atics of Chasiempis and proposed no less than three new taxa (Stejneger 1887). The only actual specimens available to him, however, were those taken on Kauai by Valdemar Knudsen and forwarded to the Smithsonian Institution. Part of the proliferation of taxa resulted from the two distinct plumage types found on each island, now generally regarded as adult and "immature." Thus, Stejneger's name Chasiempis dolei, the type of which (USNM 110040) is a gray-backed adult bird from Kauai, is a pure synonym of C. sclateri Ridgway, 1882, the cotypes of which (USNM 41955, 41956) are brown-backed immature birds from Kauai (see Deignan 1961:460).

Stejneger's other two names, *C. ridgwayi* and *C. ibidis*, were based on a color plate published in *Ibis* (hence the latter name) by Sclater (1885). Although Stejneger attempted to forestall criticism by saying that if *C. ibidis* were not distinct from *C. sclateri* "then I can only say that the published figure of the former is worse than useless" (Stejneger 1887:88), his contemporaries nevertheless roundly excoriated him. "It is a pity that Dr. Stejneger, with so much good material before him, should think it necessary to manufacture 'new species' out of other people's figures without seeing the specimens" (Sclater 1888:143). "On the genus *Chasiempis* I would offer only one remark, and that is a word of caution to those who would, on the evidence of from a couple to half-a-dozen of specimens, or perhaps even on the evidence of a badly-coloured plate, attempt to break it up into definable 'species'" (Newton 1892:469). With the benefit of hindsight, it is fair to note that the plate in question is actually quite accurate, and that both of Stejneger's taxa based on it are now seen to be valid.

Although both figures were stated to be based on particular specimens, these have been overlooked in the general collections of the British Museum (Natural History) for nearly a century and have long gone unrecognized as types (neither is mentioned in Warren & Harrison 1971). They still exist, however, and I was able to examine and compare them with the series of *Chasiempis* in the National Museum of Natural History, Smithsonian Institution (USNM), and with a selection of specimens from the American Museum of Natural History that were in plumage comparable to that of *C. ibidis* (see Material Examined).

One of Stejneger's names was applied to "the brown and chestnut colored bird from Hawaii, Ch. ridgwayi, figured on plate i, Ibis, 1885" (Stejneger 1887:87). Sclater (1885: 18) had mentioned two specimens collected by the Challenger Expedition at Hilo, Hawaii, in August, 1875, and stated that "the figure (Plate I fig. 1) has been taken from one of them." Both specimens are in nearly identical plumage but one of them (BMNH 80.11.18.445, original no. 529) is in much worse condition, with most of the feathers of the rump missing and many of the rectrices broken off, so that only one remains that has a white tip. Because the plate shows a bird with a large white rump patch and white tips on most of the rectrices, if it were drawn from a single specimen, as stated by Sclater, this would have to be BMNH

80.11.18.444 (original no. 528), which I here affirm to be the holotype of *Chasiempis ridgwayi* Stejneger (culmen, 13.1 mm; wing, 67.7; tail 54.5, tarsi not measurable). No nomenclatural problems attach to this identification, as the specimen is of known provenance and is clearly the bird from windward Hawaii currently known as *Chasiempis sandwichensis ridgwayi*.

The specimen from which Sclater's remaining figure was drawn, the type of Chasiempis ibidis, has a much more curious and enigmatic history. Sclater (1885:18) received the specimen, labelled "Chili," prior to 1862 from the dealer Verreaux and mistook it for some undetermined species of Tyrannidae. Thus he once listed it as "Cnipolegus \_\_?" (Sclater 1862:203), an error that he later corrected to Chasiempis sandwichensis (Sclater 1873) after comparing the specimen with material in the Berlin Museum (Sclater 1885), where the only specimens of *Chasiempis* then were those collected on Oahu by Deppe in 1837. The same specimen was listed by Sharpe (1879) as *Chasiempis sandvicensis (sic)*, at which time it was the only example of Elepaio in the British Museum. It is the only Elepaio from the Sclater collection ex Verreaux in the British Museum collections or elsewhere and is thus certainly identifiable as the holotype of Chasiempis ibidis Stejneger (BMNH 73.8.6.3; culmen broken; wing, 62.9 mm; tail, 59.3; tarsus, 25.1). It is in fresh, unworn plumage and agrees perfectly with the figure in Sclater's (1885) plate except that the ochraceous color at the posterior margin of the throat is somewhat darker than depicted.

Circumstantial evidence alone would suggest that this specimen came from Oahu, as most commerce then, as now, was through Honolulu. That it had been labelled "Chili" is understandable as Chile was then a dispatch point for cargo going "around the Horn" to Europe. In the Senckenberg Museum, Frankfurt, are at least five specimens of Hawaiian birds labelled as received or exchanged from Chile in 1842, the notation "Erh[halten] von Chili" having been mistaken by Banko (1979:31, 32, 80) for the collector's name. Of these, three are of the Oahu form of *Loxops virens*; the other two belong to species that show no interisland variation (*Psittirostra psittacea* and *Vestiaria coccinea*). It is uncertain who was supplying specimens from Oahu through Chile at that time, but it was very likely the same source whence Verreaux obtained the specimen of *Chasiempis* sold to Sclater.

As far as the actual characters of the holotype of *Chasiempis ibidis* are concerned, Stejneger (1887:88) was perfectly correct in describing it as differing from *C. sclateri* of Kauai, which is "much deeper and richer tawny color . . . and this color extends much further on breast, flanks, and tibiae than in *Ch. ibidis.*"

Wilson (1891) considered C. ibidis to have come from Oahu. The new form from Oahu that he called *Chasiempis gavi* he described as a second species from that island in addition to C. ibidis. Why then has the Oahu bird come to be known as C. gavi rather than C. ibidis? This results entirely from Rothschild's (1893:71) statement that the type of C. *ibidis* "agrees best with the young Hawaiian bird, so there is no doubt it really came from Hawaii." This is erroneous. Rothschild's conclusion appears to have been unduly influenced by some exceptional specimens (e.g. AMNH 607136, 607138) collected by Palmer on the Kona coast of Hawaii, the first mentioned having served as the model for the immature of C. sandwichensis in Rothschild's accompanying plate. These birds are much more rufescent, especially on the throat and breast, than typical immature birds from Hawaii, which are dark brownish above, with a grayish crown, and white lores and underparts. The light tawny ochraceous color of the type of C. *ibidis* is very unlike this and is matched only by specimens from Oahu. The exceptionally

rufescent specimens from Hawaii are still much darker, more chestnut, above, especially on the rump, than in *C. ibidis*. Another overlooked difference is in the shape of the bill, which in birds from Oahu and Kauai appears broader and flatter than in birds from Hawaii. Although the bill in the type of *C. ibidis* is damaged and lacks the tip of the upper part, its shape agrees better with birds from Oahu than with those of Hawaii.

The holotype of *Chasiempis ibidis* is unquestionably representative of the Oahu population of Elepaio, as Wilson (1891) himself recognized. Because *Chasiempis ibidis* Stejneger, 1887, has priority over *Chasiempis gayi* Wilson, 1891, the Oahu Elepaio should now be known as *Chasiempis ibidis* or *Chasiempis sandwichensis ibidis*.

Material examined.—Chasiempis s. sandwichensis: AMNH 607118, AMNH 607125, AMNH 607136, AMNH 607138. C. s. ridgwayi: BMNH 80.11.18.444 (holotype), BMNH 80.11.18.445, AMNH 193362, AMNH 193366, AMNH 193368, plus about 30 USNM specimens in immature plumage. C. ibidis: BMNH 73.8.6.3 (holotype), AMNH 193354, AMNH 193355, AMNH 193357, AMNH 168638, AMNH 199353, AMNH 607160, USNM 301122. C. sclateri: AMNH 168639, AMNH 193347, AMNH 607188, AMNH 607189, AMNH 607190, AMNH 607198, USNM 41955 and 41956 (cotypes), USNM 110040 (type of C. dolei), USNM 110037, USNM 110038, USNM 116782, USNM 116783, USNM 493863, USNM 493864, USNM 591935, USNM 591936.

## Acknowledgments

I am exceedingly grateful to Graham Cowles, Sub-Department of Ornithology, British Museum (Natural History) (BMNH), Tring, for lending the specimens that proved to be the types of *C. ridgwayi* and *C. ibidis*, and to Richard A. Sloss and Mary LeCroy, American Museum of Natural History (AMNH), New York, for supplying additional comparative material. I also thank D. S. Peters for access to specimens of Hawaiian birds in the Senckenberg Museum, Frankfurt.

## Literature Cited

- Banko, W. E. 1979. History of endemic Hawaiian birds [sic] specimens in museum collections. – Cooperative National Park Resources Study Unit, University of Hawaii, Avian History Report 2:1-80.
- Berlepsch, H. von, & P. Leverkühn. 1890. Studien über südamerikanische Vögel nebst Beschreibungen neuer Arte.-Ornis 6:1-32.
- Deignan, H. G. 1961. Type specimens of birds in the United States National Museum.—United States National Museum Bulletin 221:1–718.
- Gmelin, J. F. 1789. Systema Naturae. Volume 1, part2. Lipsiae, G. E. Beer, pp. 501–1032.
- Henshaw, H. W. 1902. The Elepaio of Hawaii. Auk 19:225–232.
- Newton, A. 1892. Ornithology of the Sandwich Islands.—Nature 45:465–469.
- Pratt, H. D. 1979. A new subspecies of the Elepaio, Chasiempis sandwichensis, from the island of Hawaii.-Bulletin of the British Ornithologists' Club 99:105-108.
- ———. 1980. Intra-island variation in the 'Elepaio on the Island of Hawai'i.—Condor 82:449–458.
- Ridgway, R. 1882. Description of a new fly-catcher and a supposed new petrel from the Sandwich Islands.—Proceedings of the United States National Museum 4:337-338.

- Rothschild, W. 1893. The avifauna of Laysan and the neighbouring islands: With a complete history to date of the birds of the Hawaiian possessions. Part 2. London, R. H. Porter, pp. 59– 126.
- Sclater, P. L. 1862. Catalogue of a collection of American birds. London, N. Trubner and Co., 368 pp.
  - —. 1873. [Corrections to Sclater's Catalogue of American Birds.]—Proceedings of the Zoological Society of London 1873:554–555.
  - ——. 1885. On the muscicapine genus Chasiempis.—Ibis, series 5, 3:17–19, plate 1.
  - ——. 1888. [review] Stejneger on Hawaiian birds.— Ibis, series 5, 6:143–144.
- Sharpe, R. B. 1879. Catalogue of the birds in the British Museum. London, British Museum, 494 pp.
- Stejneger, L. H. 1887. Birds of Kauai Island, Hawaiian Archipelago, collected by Mr. Valdemar Knudsen, with descriptions of new species.— Proceedings of the United States National Museum 10:75-102.
- Warren, R. L. M., & C. J. O. Harrison. 1971. Typespecimens of birds in the British Museum (Natural History). Volume 2, passerines. London, British Museum (Natural History), 628 pp.
- Wilson, S. B. 1891. On the muscicapine genus Chasiempis, with a description of a new species.— Proceedings of the Zoological Society of London 1891:164–166.

Department of Vertebrate Zoology, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560.